Department of Commerce
Architecture Affinity Group

Architecture Inventory Summary
June 15, 1999

The information in the subsequent tables summarizes the information gathered to date from the "Inventory of IT Architecture Efforts Survey" conducted by the Department of Commerce's Architecture Affinity Group. There are multiple pages to represent the series of questions and responses with each line representing an organization. The organizations are as follows:

OSec	Office of the Secretary (Department of Commerce)
GC	Office of General Counsel
BXA	Bureau of Export Administration
EDA	Economic Development Administration
ESA	Economic & Statistics Administration
BOC	Bureau of Census
BEA	Bureau of Economic Analysis
STAT-USA	STAT-USA
ITA	International Trade Administration
NOAA	National Oceanic & Atmospheric Administration
NISDI	NOAA Information Services Delivery Initiative
NWS	National Weather Service
NESDIS	National Environmental Satellite, Data and Information Service
NMFS	National Marine Fisheries Service
NOS	National Ocean Service
OAR GFDL	Office of Oceanic and Atmospheric Research
MBDA	Minority Business Development Agency
NTIA	National Telecommunications & Information Administration
PTO	Patent and Trademark Office
TA	Technology Administration
NIST	National Institute of Standards & Technology
NTIS	National Technical Information Service

Department of Commerce - Architecture Inventory Efforts Survey — Table 1

Organization		What is the status of your organization's efforts to develop an IT Architecture?	What parts of the org are covered by the architecture?		What is the scope of your IT architecture?						
			Entire	Portions	Administrative Business Processes	Mission Business Processes	Information Sets/ Databases	Appl. Software	Technology Infrastructure		
									HW	SW	TC
OSec	OSec	Not Yet Contacted									
	GC	Not Yet Contacted									
BXA		Completed and Implementation Underway	✓		✓	✓	✓	✓	✓	✓	✓
EDA		Initiated Not yet completed	✓		✓	✓	✓	✓	✓	✓	✓
ESA	Census	Partially Complete Remainder under Development	✓		✓	✓	✓	✓	✓	✓	✓
	BEA	Not Yet Contacted									
	STAT-USA	Not Yet Contacted									
ITA		Partially Complete Remainder under Development	✓						✓	✓	✓
NOAA	NISDI	Target Architecture Completed									
	NWS	Under Development	✓		✓	✓	✓	✓	✓	✓	✓
	NESDIS	Completed and Implementation Underway		✓		✓	✓	✓	✓	✓	✓
	NMFS	Target Architecture and Baseline Completed Implementation Underway	✓		✓	✓	✓	✓	✓	✓	✓
	NOS	Plan to Begin Soon									
	OAR GFDL	Plan to Begin Soon		✓		✓	✓	✓	✓	✓	✓
MBDA		Not Yet Contacted									
NTIA		Completed and Implementation Underway									
PTO		Competed and Implemented	✓		✓	✓	✓	✓	✓	✓	✓
TA	NIST	Not Yet Contacted									
	NTIS	Not Yet Contacted									

Organizations that are shaded have not yet been contacted and/or information is still being gathered.

Department of Commerce - Architecture Inventory Efforts Survey												Table 2
Organization		How was the architecture developed?			If you followed outside guidance, what was it? (TAFIM=Technical Architecture Framework for Information Management, TISAF=Treasury Information System Architecture Framework, TADP=Treasury Architecture Development Process)	Resources Expended					
						Time				Approx Cost	FTE
		In-House	Contractor	Combination		0-6 mos.	6-12 mos.	1-2 yrs.	2+ yrs.		
OSec	OSec										
	GC										
BXA				✓	Contractor Experience		✓			$ 150K	6
EDA				✓		✓					.25
ESA	Census			✓	Federal Architecture Framework TISAF, TADP		✓			$ 80K	.5
	BEA										
	STAT-USA										
ITA		✓				✓					.25
NOAA	NISDI										4-5
	NWS	✓							✓		
	NESDIS			✓	TAFIM			✓		$ 763K	4
	NMFS			✓	TAFIM			✓		$ 500K	4
	NOS										
	OAR GFDL	✓			TAFIM		✓				1
MBDA											
NTIA		✓							✓		
PTO		✓			TAFIM, NIST APP, Internal Bureau Guidance			✓			1
TA	NIST										
	NTIS										

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Department of Commerce - Architecture Inventory Efforts Survey											Table 3
Organization		Is the Architecture documented and updated?			How has your organization benefitted from having an Architecture or partial Architecture?						
		No / Not Yet	Doc / Not Upd	Yes	Reduced Cost of Procurement, Maintenance, Operations	Improved Business Process	Easier to Communicate w/ outside customers	Easier to plan future IT actions and activities	Relieved OMB and other oversight requirements	Other	
OSec	OSec										
	GC										
BXA		✓				✓		✓	✓	(1)	
EDA											
ESA	Census	✓				✓		✓	✓	(2)	
	BEA										
	STAT-USA										
ITA			✓		✓			✓		(3)	
NOAA	NISDI										
	NWS										
	NESDIS		✓		✓	✓	✓	✓			
	NMFS			✓		✓	✓	✓	✓	(4)	
	NOS										
	OAR GFDL			✓	✓	✓		✓	✓		
MBDA											
NTIA				✓	✓	✓	✓	✓			
PTO				✓	✓	✓	✓	✓	✓	(5)	
TA	NIST										
	NTIS										

Organizations that are shaded have not yet been contacted and/or information is still being gathered.

Supplemental Information:

What contractors were used for your Architecture development?

BXA: Booz, Allen Hamilton

Census: IIT Research Institute (IITRI)

NESDIS: Marada Corporation

NMFS: SAO and KPA, Incorporated

How has your organization benefitted from having an Architecture or partial Architecture?

Other reasons stated:

(1) Easier to get funding with the Architecture documentation. Budget initiative in FY1998 was not approved based on lack of architecture.

(2) Complemented and strengthened our IT Standards Program

(3) Promoted infrastructure standardization.

(4) Fostered a cultural change from a climate of distrust, isolation and redundancy to a more collaboration and interdependence across this divers agency. As the consciousness of the importance and pervasiveness of IT throughout the agency's business processes, this climate has begun to spread well beyond the IT professionals to the agency itself.

(5) a. Response to quickly changing business requirements
b. Easier to infuse new technology
c. Reduce IT personnel training costs
d. improve productivity through data reuse and resource sharing
e. promote vendor independence through use of standards-based products
f. the most valuable benefits are that there is a tangible guideline to be used for: acquiring IT products and services, developing and maintaining automated information systems, and designing the IT infrastructure.

Do you have any other comments or advice to others contemplating IT Architecture policies or efforts?

NESDIS: Developing an IT Architecture is by no means an easy thing to do. You need the right mix of technically sound visionaries, knowledgeable systems personnel and enterprise thinkers. However, the benefits derived from having your organization operating under a common architecture are far greater than the effort put forth to achieve it.

BXA: It was well worth the time and effort. Working with the contractor was a good experience.

Census: Be sure to have architecture implementation and maintenance issues worked out up front. Have a good answer to the question, "what does it mean to me" when the users and operating users ask.

NTIA: In about 1986 NTIA's Office of Policy Coordination began reviewing ADP purchases to insure that they were needed and were the best alternative for specific business processes. They were also reviewed for consistency with our internal hardware and software standards. This stringent review process continued until about 1994. It was then decided that such detailed reviews were no longer necessary and that our Architecture and standards were firmly established.

PTO: Before starting IT Architecture efforts, an agency should:

1 Research the IT Architecture Frameworks that currently exist in governments, industries or education arenas
2 Select a framework that best fits your agency's strategic corporate performance and information technology plans
3 Ensure the developer(s) have in-depth understanding and knowledge of the framework to be used and be familiar with the agency's strategic information technology plan
4 Interact closely with agency senior lead business managers to educate and obtain buy-in
5 Use extreme care on the Standards of Profile and Products development to ensure interoperability. The products should be tested against your agency environment first. The NIST Software Standard Group and Conformance Testing Group have listed some standards and validated products on the web for references. Other standard bodies, e.g., IEEE, ISO, W3C can also be referenced
6 Set up Software Engineering Process Group and Technical Review Board to enforce your architecture
7 Establish life cycle management policies and procedures that require conformance to IT Architecture
8 Establish acquisition policy and procedures that require conformance to IT Architecture.